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ON INCIDENCE OF TAXATION.

IN the March number of the JOURNAL there appeared a review by Professor Miller of my work on the *Shifting and Incidence of Taxation*. The review was courteous and appreciative, but some of the points seem to call for a little explanation. Needless to state, I sincerely welcome all criticism, for what we are after is of course the truth, and not any petty preconceived ideas of our own.

First, as to Ricardo and the wage-fund. The critic puts "*sic*" after my term "wage-fund." I confess that "wages-fund" is frequently employed. But the other term is just as common. President Walker, *e. g.*, heads the whole chapter in his book on Wages, with the word "wage-fund;" Mr. Smart in his translation of Böhm-Bawerk's work uses the same term; and I could refer to a score of other equally good authorities. A few pages further on, as well as in other parts of the same issue of your journal,¹ it is used repeatedly. The word, in fact, can be used either in the singular or in the plural. It is the same as with "trade-unions" and "trades-unions."

So much for nomenclature. Now as to facts. What I mean by the important part of the wage-fund doctrine, is the theory that there is a predetermined fund, whose amount depends on profits, and which rises as profits fall, and *vice versa*. There is another part of the doctrine, namely, that wages of a particular trade cannot rise without wages in another trade falling. Now Ricardo certainly held the first part of the doctrine, and I am inclined to believe that he held the last part also. The whole theory is found in James Mill, who expressly tells us that the doctrines are not new with him, but that he bases himself on the work of his predecessor; and John Stuart Mill tells us that his father got the economic doctrine from Ricardo. Neither Ricardo, nor Mill, nor Senior held to the "perfected form" of the theory; but in so far as the essence of the doctrine is concerned, together with the inference of wages falling as profits rise, Ricardo certainly held that view. And that is the practical point to which I referred in the discussion of incidence of taxation; it is, for the purposes of that discussion, the essential part of the wage-fund doctrine. Ricardo says (chap. xvi.): "By taxing the profits of stock, you would

¹ It is the policy of the JOURNAL to allow contributors as much freedom as possible in the use of terms, especially in anything relating to controversial subjects, even if it might be a question of good usage.—Editor.

probably alter the rate at which the *funds* for the maintenance of labor increase and wages would be disproportioned to the state of that *fund*, by being too high, etc." If that is not the wage-fund, or at least an important part of it, I stand corrected.

Coming to the next point, taxes on land. I willingly confess that more simple methods of diminishing supply are possible than the one to which I allude.

But I must take exception to the argument on p. 291. Professor Miller says truly that good wheat land will also raise good swine. But how does that affect the problem? If a tax is put on the land or the rent, the supply of wheat may indeed be diminished, but on his own showing the supply of swine will be increased. What the consumer loses in the one case, he gains in the other. Now we are discussing not a tax on *wheat* land, but a tax on *land*; not a tax on *special* kinds of land, but a tax on land in *general* (*exclusive* in the sense only of not being assessed also on non-landed property). How then, on his own showing, will a tax on *land* in *general* raise the price of *land products in general*; swine are as much agricultural products as wheat, and he himself confesses that there will be no alteration in the total output (although the relations of the various kinds of produce to each other may change). If that is true, how can a tax on agricultural profits be shifted. Professor Miller has confused a tax on special agricultural profits (which I did not discuss at all under the head of the land tax) with a tax on *general agricultural profits*. He has confused an exclusive tax on agricultural profits with a tax on special agricultural profits.

The points I seek to make are three in number :

First, I say that the Ricardian theory is good so far as it goes, but that the assumption of absolute mobility is exaggerated. I may indeed have exaggerated the objection in turn, but I expressly state on p. 98 that this is not the main contention. After my explanation below, it will be seen why Professor Miller's objection in the note on p. 289 is without foundation. The no-profits theory does not lead to the non-transferability of a tax on agricultural profits. Ricardo is right so far as the conditions of absolute mobility are present. In so far as they are not present, we must qualify his statement, as Professor Marshall himself confesses.

Secondly, I say that more important, practically, than the degree of mobility is the fact of international conditions. Professor Miller says

that it is easy to overestimate this; and that may be true. But he does not allow it to affect the problem at all, although he gives no reason for his position.

Thirdly, and chiefly, I say that everything depends on whether the tax is a general tax or a special tax. In England, the tax on agricultural profits (apart from the local rates) is simply a part of the general income tax; and in America the real estate tax is simply a part of the general property tax, especially outside of the large cities. In so far as this is true, the chances of the tax resting on the landowner are increased. How then is it proved that "a considerable portion" of the tax is to-day actually shifted to the consumer?

The main criticism, however, is directed against my discussion of the tax on profits. Let me say, however, that granting the theory of profits on which it is based, my conclusions are not so illogical as the critic seems to think on the bottom of p. 294. This criticism appears to me to arise from a failure to understand what the theory really means.

A, B, C are the producers of a certain commodity. A is stupid, or unfortunate, or possesses no advantages; B has more advantages; C has most. A can produce a certain commodity at 30 cents, B at 29 cents, C at 28 cents. Now if there is no monopoly, the commodity must sell at 30 cents. It will not sell at less because on the given equilibrium of supply and demand the 30 cent product is a part of the necessary supply. It will not sell at more, because if it did another man D who has been unable to compete, because it cost him more than 30 cents to produce, would immediately enter the field. The equilibrium would be altered, the supply would increase and prices would fall, unless demand changed.

Now let us suppose that B's profits are 2 per cent. and C's 4 per cent. B cannot make as high profits as C because he is less intelligent, or has less capital or possesses less advantages in general. He will not go out of business, because he does not see his way clear to making more profits in any other business. Now suppose a tax is imposed on the profits of this particular business alone; B will immediately look around for another opening. He will expect to put his intelligence and capital to better use elsewhere. He will not indeed expect to make more than 2 per cent. profits in some other business (unless he has special advantages, which we cannot suppose, for he would otherwise have left before); but he will expect to make at least

2 per cent. A, indeed, will not leave the business, because he makes no profits anyway—or, more strictly, the C's are continually leaving the business in order to improve their condition, and being replaced by other C's, who also make no profits,—so that we can speak of a typical C. The point now is this; not necessarily the marginal producer, but some producer who has been making profits will leave the business, because by applying the same brains and the same industry to an untaxed business he can make larger profits than in the taxed industry. This would decrease supply and therefore increase price. That is, the shifting of an *exclusive* tax on profits is just as logical in the no-profits theory, as on the normal profits theory. It must be remembered that most producers make profits, and that there is no reason why they should voluntarily take less profits. It is the exodus of the profits-receiver, not necessarily of the no-profits man, that raises prices. Hence the statement that a consistent application of the no-profits theory would necessarily lead to the conclusion that a tax on competitive profits cannot be shifted, is incorrect.

It might be urged that if some producers leave the taxed business, the transference of capital and labor to the new industry would affect the supply price of the new product, and that the rise of prices in the one case would be offset by the fall of prices in the other case. But this objection is not valid, because we are discussing the effect of a tax on the consumers of the taxed article, not on the other consumers of the untaxed article. The objection in fact is no more applicable to the no-profits theory than to the normal profits theory; and it rests on a confusion between a general tax and a special tax on profits. For, on the normal profits theory also, the taxed producer is assumed to transfer his capital and labor to the untaxed industry. If it is true that a decrease in the supply in the taxed industry will be attended by an increase of the supply in the untaxed industry, it will be no less true on the theory of normal profits than on the theory of no-profits. Professor Miller contends that the shifting of a tax on special profits is “perfectly intelligible” on the normal profits theory. If that is true, I fail to see why it is not also “perfectly intelligible” on the no-profits theory.

In fact, I may be pardoned for believing that the inferences from the no-profits theory are not more untenable, but less untenable, than the inferences from the normal profits theory. For in the normal profits theory, profits are a part of the normal cost of production.

The conclusion then is inevitable that a tax on general profits would necessarily increase the normal cost of production, and thus be shifted to the consumer. Yet it is a cardinal doctrine of the old school (*cf.* J. S. MILL, book v., chap. iii., sec. 3.) that a "general and equal tax on all profits will not affect general prices." There is here a serious discrepancy. We may assume that everyone accepts the conclusion that a general tax on net profits cannot be shifted. The conclusion may be easily drawn from the no-profits theory (as I have done on page 167 of my monograph); but it is difficult to see how it can be drawn from the normal profits theory with profits regarded as a factor in supply-price. Either the conclusion or the premises are untrue. If we accept the conclusion, we must abandon the premises.

The statement (p. 295) that according to my theory a tax on profits cannot be shifted, because by my own showing profits are like rent, while a tax on rent cannot raise prices of produce, rests on another misconception. The point under discussion was a tax on particular profits, not on general profits. Now in discussing a tax on rent, the point was a *general* tax on rent. If a special tax were put on the rent of particular plots of land, like corn land, and not on that of other plots of land, like rye land, the tax on rent *would also be shifted*. For the corn planters would now turn to rye planting, and thus affect the supply, and thus the price of the corn. In fact the argument would be the same as the one which Professor Miller himself uses on page 291, only that the argument I have just used applies to a tax on *special rents*, and not as he seems to think (p. 290), to an exclusive tax on *all* rents.

Again, Professor Miller objects that nothing is said of interest, and goes on to assume that interest is not included in profits. The whole basis of his contention falls away, because the assumption is erroneous. I maintain, and I thought it could be plainly inferred from the context, that the marginal theory applies to interest as well as to profits. Whether the marginal producer has invested \$100,000, or nothing, in the business, the result is the same. If he has invested nothing, he makes nothing; if he has invested \$100,000, he still makes nothing. In the one case he earns no profits; in the other case he earns neither profits nor interest.

Interest, properly speaking, is the remuneration for the use of capital loaned to another. If all production were carried on on borrowed capital, then indeed, but only then, would the interest payable be a

necessary part of the cost of production. But as long as producers use their own capital entirely in many cases, competitive prices will be forced down to the level of the man who earns nothing on his investment. He will need to pay no interest to any one, and interest will then not form a part of cost. Those who have borrowed capital will have to pay their interest out of their surplus gains. If they are the marginal producers they will have no surplus, and will be unable to pay their debts. I know of many business men, trading on their own capital, who make it a practice to mark off an amount equal to 4 per cent. or 6 per cent. for interest; but I also know that in many such cases the profits are then minus profits. The marginal producer is he who does not make even interest on his capital. My argument against the excess-of-price-above-tax doctrine is, hence, not in the least illogical.

Therefore, if my premises be granted, I think it will be seen that the statement on page 294 that I "have not reasoned strictly consistently with the fundamental premise," is unjust. In the one case the critic imputes to me an assumption which I do not make; in the other case he fails to grasp the real import of my position.

On page 289, some phrases of mine are objected to. I confess the phrase "net profits ordinarily received," is a little careless, but that is all. The word "ordinarily" ought to have come a little earlier in the sentence. What I meant was that selling price varies ordinarily with the net profits received. If there are no profits the price is zero, if there are larger profits the price is ordinarily higher. But the word "ordinarily" had no connection in my mind with "normal" profits.

So, also, in the second phrase, by "usual" profits, I meant the profits which the *particular* producer was accustomed to receive, but not any "normal" profits of the trade as such. Still I confess that the phrases are misleading.

This is, of course, not the place to defend the general theory of distribution which lies at the basis of my argument. But let me say that I consider the abstraction of the "no-profits" middleman neither "unreal" nor "dangerous." Let me say further that I do not think General Walker quite consistent in his theory of interest; and that in my opinion the marginal theory of interest in no way stands opposed to the doctrine of an average rate of interest, any more than the no-profits theory stands opposed to the doctrine of average (not *normal*) profits. But to explain this would require a separate essay. Finally,

while I thoroughly agree with the critic in expecting that new light will be thrown on the whole subject in the forthcoming second volume of Professor Marshall, I am not quite sure that his theory of distribution is final. For I have never been able to accept the validity of Professor Marshall's distinction between profits and quasi-rents, or between long-period and short-period profits, with the conclusion that the former enter into price and the latter do not. If long-period profits enter into price, then long-period rents also enter into price. And again, if long-period profits are a part of the normal cost of production, then a tax on profits in general will increase price and thus fall on the consumers. Yet this, as we know, is just the opposite of the doctrine accepted by the English writers.

It will be interesting to learn how Professor Marshall will escape from the dilemma. He has been unable to accept the whole theory of profits; but it is difficult to see the justification of his distinction between normal profits and differential profits. If his theory of incidence is to be built up on this distinction, it will no doubt be stimulating, but perhaps not entirely convincing.

COLUMBIA COLLEGE.

EDWIN R. A. SELIGMAN.

FEW problems present at once so many difficulties as the problem of incidence. The process of tax-shifting is often so obscure and complicated that it is a problem of considerable intricacy to find where the burden of a given tax actually and finally rests. The difficulties which are sufficiently perplexing in the theoretical investigation, multiply themselves rapidly when it is sought to ascertain the incidence of a tax in a concrete case. At the same time, few investigations are more certain to reveal the serious limitations and imperfections of the economic theories of value and distribution than the problem of determining the incidence of taxation. Complexities which may be ignored in the one case demand careful attention in the other. The neglected elements and secondary factors mean everything to the student of incidence; they are too frequently nothing to the economic theorist. It may well happen, therefore, that there should be substantial agreement among students on points of general economic theory and yet disagreement on questions, even purely theoretical questions, of incidence. The disagreement necessarily widens as the common ground of economic theory occupied narrows.

My criticisms of Professor Seligman's doctrine of incidence were chiefly two; the one was directed against the method and conclusion, the other against the logic rather than the conclusion, of his argument. I confess that my interest in his discussion of the tax on profits was chiefly stimulated by the new light it seemed to throw on certain weaknesses of the no-profits theory. It seemed to me that a theory, in the statement of which it was thought necessary to deny that profits enter into price, would logically preclude the conclusion that a *tax* on profits could enter into price—in short that there was here, on the surface at least, a *contradictio*. Nor does Professor Seligman's present explanation satisfactorily dispose of the discrepancy, as I undertake to show below. It seems to me either to involve him in an implicit abandonment of the no-profits theory, or else to show that this theory does not mean what has ordinarily been supposed; in which case a still further definition of its terms and a more exact examination of its limitations may be desirable.

1. Taking up in their order the points at issue, there comes first the question of phraseology. I feel that an apology is almost due from me to the readers of the JOURNAL for having raised so trivial a point. My own preference for the term wages-fund rests upon the two grounds that good usage would seem to require that scientific doctrines should be known and remembered by the names given them by their accredited authors and, secondly, that there is good reason for believing that the term "wage-fund" is questionable English. Wages-fund is the name given to a particular theory of wages by its authoritative holders. This theory occupies at least a place of importance, if not of dignity, in the history of economic thought, and it seems worth while, in the absence of strong reasons of a contrary nature, that it should be allowed to bear its baptismal name. I cannot but believe that the peculiar train of ideas suggested by its unfortunate name is largely responsible for the scant justice which has been done the wages-fund theory in recent years. But now that the injury has been done the name might be permitted to stand untouched. I am not aware that "wage-fund" is used by any but hostile critics and those who have derived their first impression of the wages-fund doctrine at second-hand from such writers. The name of President Walker is, indeed, high authority to quote. But, on the other side, Professors Sidgwick and Marshall may be recalled among living writers, who seem to find themselves under no necessity of abandoning the original name, even

though they do not adhere to the formula, of the wages-fund theory. Finally, good authority declares *wage-fund* a questionable English compound.¹

2. The question whether Ricardo held the wages-fund doctrine cannot be decided as a mere question of words. It requires no very extended acquaintance with Ricardo to know that he cannot be interpreted by phrases. His language is frequently ambiguous. He himself was aware of his limitations as a writer, though he did not succeed in overcoming them. Particular passages of his work, therefore, can be interpreted only in the light of his whole thought. Professor Marshall and others have showed the need of dealing generously with Ricardo if we would understand him rightly. It will not do to treat the *Principles* by rigorous rules of interpretation. Though not, in a high sense, a systematic or organic whole, Ricardo's treatise is pervaded by certain fundamental conceptions that give it a certain degree of unity. Perhaps the most important of these conceptions is his theory of profits. At any rate it is only through this theory that we can hope to reach the core of his thinking on wages.

Ricardo's habits of life and mind led him to contemplate the operations of industry and exchange from the standpoint of the capitalist employer. He seldom took a broadly human outlook, nor did he often bring himself to the laborer's point of view. The capitalist occupied the central point of his economic analysis. When he spoke of wages he more frequently had in mind the payer than the receiver, the purchaser than the seller of labor. It was his endeavor to find the conditions affecting the rate of profits that brought him to the subject of wages. What labor cost to the employer was wages; when he paid much, wages were said to be high, although it is easily conceivable that, absolutely considered, they may, at the same time, have been low. Ricardo constantly identifies wages with cost of labor.²

¹Among "instances of expression that have come from professional into more or less general, but not into good, use," Professor A. S. Hill of Harvard University mentions in his *Principles of Rhetoric*, p. 8, "from a school in political economy, *wage* and *wage-fund* ('wages, wages-fund')."

²This is also the view taken by that eminent Ricardian, Professor Marshall. Ricardo "saw that the real interest of the employer lay not in the amount of wages that he paid to the laborer, but in the ratio which those wages bore to the value of the produce resulting from the laborer's work: and he decided to regard the rate of wages as measured by this ratio: and to say that wages rose when this ratio increased, and that they fell when it diminished."—*Principles of Economics*, (2 ed.), vol. i., p. 581.

This led him to, or rather was, his doctrine of proportional wages. He was in search of a principle for determining the division of the value of the produce between wages and profits and the investigation issued in the doctrine that high wages make low profits. But going a step further he found that wages was only the proximate condition affecting profits, only the medium through which some more fundamental force was acting. This deeper force was the price of food, with which wages varied directly. A high price of food was the cause of high wages and, in turn, of low profits. This is the essence of the Ricardian doctrine of wages, and in it there is nothing of the wages-fund doctrine.

The wages-fund theory is an attempt to explain the fact and conditions of absolute wages. No doubt Ricardo sometimes uses the word wages in the sense of absolute wages, and it frequently requires acumen on the part of the reader to discriminate sharply in which sense he is speaking of wages in a particular passage.¹ But even where he speaks of wages in terms of absolute, and not of relative, amount he is yet not on the ground of the wages-fund theory. I suppose it must be admitted in view of controversies not yet forgotten that there is room for difference of opinion as to what the essential content of the wages-fund theory really is. For my own part, I have never understood it to state or to imply that the fund out of which wages were said to be paid, "rises as profits fall and *vice versa*." That may or may not be an important truth, but it is not the particular truth the wages-fund theory was seeking to establish. That, I repeat, is the Ricardian doctrine of proportional wages and, so far from its being an integral part of the wages-fund theory, the connection traced by that theory between wages and profits is of quite an opposite character. Under the wages-fund theory, high profits make high wages. The rise of profits is the antecedent condition of the rise of wages, is the source

¹ Senior (*Political Economy*, pp. 142—147) complained of Ricardo's ambiguity in the use of the word, and Whately, in his Oxford lectures, held it up as a warning example, in a passage which may be quoted: by speaking of wages sometimes (in the ordinary sense) as a certain *amount*, and sometimes (in the sense he introduced) as a certain *proportion*, he has involved the whole subject in perplexity. He, and several who have followed him, have spoken of *high or low* wages, sometimes in reference to the laborer's receiving so much *per day*, sometimes to his receiving so much *per cent.* of the price of the commodity he produces: and thus a vein, as it were, of ambiguity and confusion, runs through all the discussions connected with the subject.—*Lectures on Political Economy* (3 ed.), p. 230.

and, partly, the cause of those increased accumulations of wages-capital which produce the rise. I understand the wages-fund theory to be an attempt to explain, under the existing "capitalistic" organization of industrial society, the conditions determining, in the aggregate, the amount of wealth expended as wages in the hiring of labor; more particularly, to draw attention to the action of the mechanism, so to speak, through which this wealth finds its way into the hands of laborers. Starting from the fact that the legal ownership of the product of industry is vested in the capitalist employer, it seeks an answer to the twofold question *how*, and *how much* of, the product will be distributed among laborers. In its baldest form, it states that wages are paid out of, and so may be said to depend on, savings; secondly, that savings constitute the channel through which wealth used in the remuneration of the services of hired labor, must flow in reaching its destination. The more complete answer is found in the further analysis of those varied influences operating upon human volition which, taken collectively and in the result, we call the accumulative principle. It is the action of this principle which determines, under given circumstances of productiveness, the flow of savings from time to time. Mills' "law of increase of capital" is complementary to and interprets, the statement that wages depend on capital; it is, in an appropriate sense, almost his law of wages and his certainly was the wages-fund theory.

This is not the place to trace the genesis of the wages-fund theory. But it seems to go back for its beginning to the peculiar conception of capital and the supposed necessity the laborer had of the advances of the capitalist, which was stated for English political economy by Adam Smith. Ricardo gave greater definiteness to the conception, studied more closely the essential nature of the investment of capital, and so, by gradual transition, made easy for others the formulation of the wages-fund theory. To Ricardo not only is food capital, but capital—he all but commits himself to the assertion—is food. Those who can discover no more meaning in the wages-fund theory of modern English political economy than the elementary truth that laborers cannot exist unless they are supplied with food and other necessities, will have no difficulty in tracing the theory back to certain phrases of Smith and Ricardo. But the wages-fund theory is not a question of words or of a sentence. To my mind, Ricardo stated rather than solved the problem of the wages-fund. He gives the formal state-

ment of the problem of which the wages-fund theory attempted the solution.¹

But, whatever be the correct conclusion on the question whether Ricardo held the wages-fund doctrine, it seems quite clear that his doctrine that a tax on wages would fall wholly on profits connects itself with his theories of natural and of proportional wages rather than with any wages-fund theory. That point was the particular occasion of my criticism of Professor Seligman's interpretation of Ricardo, and on that point, at least, I cannot but believe that he has failed to catch the essence of the Ricardian doctrine. That doctrine, once more, is that, fundamentally profits depend on the price of food; from this it is easy to deduce the conclusion that a tax on wages, which, according to Ricardo, is hardly distinguishable from a tax on necessaries, will raise (money) wages at the expense of profits. A part of this doctrine of incidence was borrowed by Ricardo from Smith, the other half was supplied by his own theory of proportional wages. According to both, a tax on wages would raise wages; but, Ricardo added, "any tax which shall have the effect of raising wages will be paid by a diminution of profits." And why, if it is not because high wages mean low profits? In the passage which Professor Seligman cites as showing that Ricardo held the doctrine of the wages-fund, one is inclined to ask what Professor Seligman understands Ricardo to have meant by the phrase *too high*? And, by way of comment, I am tempted to recall the observation of Senior that "the whole of the confusion has been occasioned by the verbal ambiguity which we have pointed out, and would not have arisen if Mr. Ricardo had used any other adjectives than *high* and *low* to express a larger or smaller proportion."

3. Coming next to the question of the incidence of taxes on land,

¹ Such statements as "labor is dear when it is scarce, cheap when it is plentiful," "in proportion to the increase of capital will be the increase in the demand for labor," "the accumulation of capital, or of the means of employing labor . . . must depend on the productive powers of labor," do not seem to me to militate against the substantial accuracy of the interpretation proposed above. They are highly suggestive hints, that were developed by later writers, and finally took shape in the wages-fund theory. It is even very doubtful whether he attached the same significance to his words that later readers and writers did. There seems to me to be no more warrant for classing Ricardo among the wages-fund writers than there would be to attribute the authorship of the classic doctrine of rent to Adam Smith on the score of the accidental statement that rent is the effect and not the cause of price.

let us begin with the Ricardian doctrine. If Professor Seligman had not raised the question, I should have supposed that, if any part of Ricardo's theory of incidence was entitled to universal assent, it would be his doctrine that an exclusive tax on land would be shifted to the consumer. This, it seemed to me, so far as it went, was at least a *theoretically* valid conclusion, however much it might need to be amended and qualified in view of special circumstance affecting incidence in concrete cases. Professor Seligman's statement above places him in substantial harmony with this view, although he disclaims that this is the main contention. It is, however, a leading point. Ricardo makes no assumption in his treatment of the incidence of land taxes, which is not made equally in every other part of his work. The common assumption underlying the whole of his economic reasoning is that "competition operates without restraint." A rejection of Ricardo's conclusion, so far as it rests upon a rejection of his leading assumption in a particular case, should have been based upon a careful examination of this premise. This was not attempted in Professor Seligman's monograph, nor is the need of it admitted in his present answer. In the monograph, the Ricardian assumption of absolute competition is matched by the assumption of almost absolute immobility implied in the statement that "only when the tax is so exorbitantly high as to swallow up the whole rent, and the whole profits, so as absolutely not to leave the cultivator any margin for living expenses, will he abandon the land in such large quantities as to affect a material decrease of supply." Now, this seems to me to be not simply an "exaggerated," but even a gratuitous assumption, and an utterly unsafe basis for generalization.

It must be admitted that agricultural capital is much more sluggish in its movement than trade capital, but is it so to an extent sufficient to invalidate the Ricardian hypothesis? This, it seems to me, is the real question. I cited one or two instances which seemed to me to bear upon this point, and, incidentally, to show that "there are more simple and less costly methods of diminishing the supply" of agricultural products than wholesale abandonment of the land, I gave the illustration that good wheat land will also raise good swine. I have reason to believe that that was an unfortunate illustration. But it was only an illustration, intended to point to the fact that there might be a considerable diminution of farming capital, even without any appreciable shrinkage of total acreage, and thus a diminution of

the total output of agricultural produce and a rise of price consequent upon the contraction of supply. To enumerate the many ways in which this diminution might be effected is not necessary; in the one case it might be by a change of crop, calling for a less heavy expenditure of capital; in the other, by diminishing the intensity of cultivation without any change of crop. So long as it is true that crops vary, not simply with the extent of acreage, but also with the character of the cultivation, it will also be true that the total output may be diminished without a change of acreage. To suppose the contrary would be to hold that the land produced everything and cultivation nothing. It is only in comparatively primitive agricultural communities that we can measure bushels in terms of acres. The almost universal abandonment of the old acreage tax shows that this stage has long been passed in most countries. The more nearly farming approaches in any district or community the stage of intensive cultivation, the more true will it become, that land may be retained in cultivation while yet falling out of condition. The agricultural history of England during the last fifteen years is ample evidence of this fact. And this is as it should be on grounds of strict reasoning. In any given case, successive doses of capital and labor will be applied to the cultivation of the land until the margin of profitable expenditure is reached, *i. e.*, the point at which cultivation yields just the ordinary returns. This margin is determined by the state of the market, extending as prices and profits rise, and receding as they fall. In either case, agricultural supply will accommodate itself to these changes. It makes no difference whether profits fall because of a fall of price or because of the imposition of a tax. The inevitable contraction of supply will produce a tendency of prices to rise. This tendency may, no doubt, be held in check by foreign competition, and so far there may be need of a theoretical qualification of Ricardo's conclusion. But it is no more than a theoretical qualification, and shows only that to whatever extent international conditions prevent the rise of price, the burden of the tax will not be shifted. To conclude, as Professor Seligman does, that no part of the tax will be shifted, is a *petitio*; it assumes what ought to be proved. Professor Seligman closes his investigation at the very point where, in a study "paying special attention to the practical aspects of the discussion," it should have begun.

It is not to be denied that it is a matter of great difficulty to locate

the actual incidence of a tax in concrete cases. No exact method of ascertaining where the tax on land in this country finally falls is known to me, and I fail to discover that any is used or proposed by Professor Seligman. To determine how much of it is shifted to the consumer we should, according to J. S. Mill's general principle for determining the incidence of a tax, have to know how much price would be lowered by the removal of the tax. But this method, even if otherwise satisfactory, is obviously impracticable. In this, as in so many cases, where the attempt is made to measure the effects of economic factors, we are forced in the end to fall back on general reasoning; and we can frequently state our conclusions in a no more satisfactory or convincing form than that of a probability or opinion. The data for an exact and final analysis of concrete circumstances are usually wanting, at any rate so far as we are seeking to express results with numerical precision. We can do little more than express positive conclusions regarding the character and tendency of most classes of economic effects, and the forces which produce them; we can seldom measure their intensity. We can make the qualitative but not the quantitative analysis. At this point we are thrown back on general reasoning and the use of scientific judgment. This imperfection, it need hardly be stated, is not peculiar to political economy; it suffers from it in common with, though in a lesser degree than, the other moral sciences.

When I stated the opinion that "probably a considerable, though varying proportion of the tax on farming capital is shifted" to the consumer at the present time, I hoped the tentative character of the conclusion would be inferred from the accompanying qualification that "at any rate the balance of probability seems to lie on the side of Ricardo." I attribute very little importance to the fact that in the United States the tax on real property is simply a part of the general property tax. Of course, the incidence of a tax on land which is merely one form of a more general tax on property or income, will be different from where the tax is a special one. But a general property tax is not an equal property tax, and it is especially under American conditions that this tax has become little more than a general property tax in name and a real property tax in fact. I supposed it was an accepted fact among American students of finance that our general property tax was a special burden on the land-owning class, and I confess my surprise at finding Professor Seligman, who has been one

of the foremost, in his admirable essays on American taxation, to expose the glaring theoretical and practical defects of the general property tax, seriously urging the argument he does.¹

The tax on agricultural profits is not to be treated in any way essentially different from a special tax upon any other class of profits. One of the first steps in the concrete investigation is to ascertain the situation of the particular industry whose profits are being taxed; what the ultimate incidence of the tax will be, will depend very much upon the relative profitableness of the different leading branches of a country's industries. In such a country as the United States, where agriculture is the leading national industry—the one whose productiveness, in the end, determines the profitableness of nearly all others—it can offer much less effective resistance to the burden of a special tax imposed upon it than in such a community as England where it occupies a place of subordinate importance in the scale of national industries. The more nearly any branch of industry approaches the state of being the primary national industry the more difficult will it be found to shift the burden of a tax laid upon it. Under such circumstances a special tax loses its distinctive peculiarity; it is a special tax only in form; in its first imposition it reaches so large a proportion of the country's producers that it takes on the character and tendencies of a general tax. The area of initial incidence is so large that its ultimate incidence must to a considerable extent coincide with it. The field within which there can take place an effective play of the economic forces of competition—through whose action alone the tax can be shifted—is narrowly circumscribed by the very fact that the industry with which we are dealing in such cases is a national industry. When an industry, on the other hand, falls into the class of subordinate ones—be they agricultural, commercial, or manufacturing—for reasons the converse of those just stated, it can more readily shift a special tax. A special tax imposed upon British agriculture could hardly fail of effectually diminishing the supply of produce and, were English farmers not so closely pressed by foreign

¹ "The theory of the property tax is not carried out. And it cannot be carried out because the conditions of the theory fail. The general mass of property has disappeared, and with it vanishes the foundation of the general property tax."

"The property tax to-day, because of its attempt to tax in tangible as well as tangible things, sins against the cardinal rules of uniformity, of equality, and of universality of taxation."—Professor SELIGMAN's article on "The General Property Tax," in the *Political Science Quarterly*, March, 1890.

competition, of ultimately increasing the price by practically the full amount of the tax. It appears, then, that it is the importance and extent of the industry rather than its character or nature, that is the point to be particularly noticed in a study of incidence.

Applying these considerations to the situation in the United States, it seems to me that while agriculture is, and, for a long time to come, must remain our leading industry, there are yet so many other important avenues of industry—mainly of the extractive character—open to our labor and capital, that, long before the point was reached where the tax on agriculture “swallowed up the whole rent, the whole profits,” etc., there would be such an exodus from the farming classes as to effect a considerable rise of price and, to this extent, a shifting of the tax. The *sauve qui peut*, if not the economic interest of the American farmer could, I think, be safely counted upon to move him before the fire reached his door. But, it will be asked, could the price of agricultural produce be raised since the American farmer depends on the foreign market? To this question I apprehend, no altogether satisfactory or definite general answer can be made. Much must no doubt depend upon the extent of the sources of supply from which the world-markets draw, and this varies for different products. For those large classes of agricultural products of which the American supply is the dominant factor in determining prices, the answer is tolerably clear. Through considerable stretches of time in the twenty years past the American wheat supply has occupied this vantage-ground. To what extent its position may have been threatened in recent years it is difficult to estimate. The field is a more tempting one for conjecture than for scientific investigation. To my mind the steady growth and comparative prosperity of our agricultural classes warrants the inference, at least, that they have not been seriously oppressed by the real property tax, and that the tax has not been an exclusive burden upon them.

4. My main criticism was, however, directed against Professor Seligman's theory of the incidence of the special tax on profits. More particularly, my contention was that the no-profits theory of value did not warrant the conclusion that a tax even on particular profits could be shifted to the consumer. It may be that my criticism arose from a failure to understand what the theory really means. I must confess to having experienced considerable difficulty in trying to attach an intelligible meaning to the theory—one that would permit of its applica-

tion as a working principle of political economy. The essence of the no-profits theory I, however, supposed to be the doctrine that price "tends to equal the cost of those articles of the class produced under the most disadvantageous conditions," *i. e.*, that price is fixed by the no-profits producer. On this supposition it is hard for me to see how a tax on profits can be shifted to the consumer. I cannot see that it makes very much difference in this respect whether the tax be special or general. The difference seems to me to fall away under a theory which makes profits the effect and not an element of price. For in either case it would be true that "the producer who enjoyed no profits would of course pay no taxes, but it is he who, according to Dr. Seligman's theory of value, would fix price¹." How, then, can the tax be shifted? Professor Seligman answers that the tax would be shifted to the consumer in the rise of price that would follow from the diminution of supply. And with this I substantially agree. But, I ask, what now becomes of the theory that price is fixed by the no-profits producer? Does not Professor Seligman's reasoning that the diminution of supply would be effected, and thus the price determined, by the exodus of some of the profits-receiving class imply an abandonment of the no-profits theory? In the illustration he gives, is it A that fixes price after the imposition of the tax, or is it the producer in some other grade? I leave Professor Seligman to answer this question in his way. I will only remark that, if it is not A, then Professor Seligman's reasoning on this subject unconsciously rests upon an *équivoque*. For, note this curious consequence that must follow from the reasoning: As the price of the commodity rises by the full amount of the tax, it rises for producer A as well as for those who pay the tax. But A's expenses not having been increased by the imposition of the tax, the rise of price leaves him not only absolutely but relatively better off than before. His immunity from the tax amounts to a differential advantage which yields him a surplus over his expenses, and he now becomes, in fact, a profits-receiver, his profits increasing as the tax increases and the price rises. In short, it appears that the old no-profits class of producers disappear into the profits-receiving class after the imposition of the tax. Their profits may henceforth be diminished, but not destroyed, by a part of the tax being levied on them. But it may be further argued, that the circumstance of their receiving profits will attract no-profits producers from other occupations, and that the

¹ *Journal of Political Economy*, vol. 1, p. 294.

competition thus stimulated will lead to an increased supply and consequent fall in price, of the commodity concerned ; and that this process will continue until, by the fall of price, profits are once more eliminated for producers of class A. This point would be reached when price was restored to the level at which it stood before the imposition of the tax. In brief, we seem to have reached by this circuitous process of reasoning, the conclusion that the tax cannot be so easily or so permanently shifted to the consumer as Professor Seligman believes it would.

It is no part of my present purpose to defend the doctrines of the classical school against Professor Seligman's criticism, and it would be presumptuous in me to say how Professor Marshall will escape from the dilemma which Professor Seligman has constructed for him. I can hardly refrain, however, from expressing the opinion that that problem will present as little difficulty to Professor Marshall as it did to Mill and to others. There seems to be no inconsistency between the conclusion as to the non-transferability of a general tax on profits and the doctrine that normal profits enter into cost. It is perfectly certain that such a tax *could* not raise general prices because, if it is necessary to state the reason, it takes the competition of buyers as well as that of sellers to make prices ; because the demand which affects money prices consists of all the money and its substitutes in the hands of the community destined to be laid out in commodities ; and, because, so long as the proportion of this to the commodities is not increased, there *can* be no rise of general prices. But even waiving this point, the case would still present no difficulty. A tax on profits, which, when confined to special profits, really does raise the price of the commodity, ceases to have that effect when it extends to all profits ; because, when all things have risen, nothing has really risen, except nominally, and even computed in money, the expenses of every producer would have increased as much as his returns. May I be permitted to remind Professor Seligman that it was also a cardinal doctrine of the old school that "high general profits cannot, any more than high general wages, be a cause of high values, because high general values are an absurdity and a contradiction. In so far as profits enter into the cost of production of all things, they cannot affect the value of any." Professor Seligman's difficulty in seeing the mode of operation of the older theory seems to proceed from the error of treating producers and consumers as distinct classes, when, in truth, considered in the

aggregate, they are the same persons. Where they are distinct classes, as, *e. g.*, with reference to some particular product, the tax on profits will tend to be shifted from the producer to the consumer.

If, on Professor Seligman's theory, a special tax on profits can be shifted, what is the difference between such a tax and a special tax on gross product? And, if there is no difference, what is the importance for the science of finance of the theory which makes so much ado about net produce and net profits? In short, what new light has its application shed on the problems of incidence? An answer to these questions may serve to turn attention to the essential "outwardness" of the no-profits theory.

The determination of the incidence of a special tax on particular rents is not so simple as Professor Seligman's reasoning would seem to imply. While it may make some difference whether the tax be general or exclusive, it is not easy to discover just what the difference is. The point is, indeed, largely one of theoretical interest, for it is unlikely that any government would, except under unusual circumstances, as, *e. g.*, where the owners of particular lands enjoyed a peculiar monopoly, make such a discrimination as is here supposed. But it is worth while attempting to examine with some care what would be the incidence of a tax on particular rents, because of the analogy said to exist between the rent of land and the profits of business and the new light that may thus be thrown upon the no-profits theory. In his illustration Professor Seligman seems to confuse a tax on rent with a tax on produce. The latter would tend to be shifted and precisely because it is not a tax on rent. Again a tax on the rents of particular plots of land could not be shifted. Such a tax would have the effect of diminishing the differential advantages enjoyed by the owner, would rest upon the land as an onerous pecuniary charge, or servitude, and which, since it would not reach the produce raised on the margin of cultivation, could not affect price. Corn land does not, *ex hypothesi*, cease to be rent land by becoming rye land. The tax, being a tax on particular *plots* of land and not on the crop, must necessarily follow the rent whatever the crop.

But it may be supposed that when Professor Seligman speaks of a tax on the rent of particular plots of land he means a tax on the rent of land engaged in growing particular kinds of produce. In this case, the tax is not so much a tax on the land as a tax upon the rent element of the produce. This case may be profitably discussed, for it

runs more nearly parallel to the case of the tax upon the profits of particular branches of industry which has occasioned this long digression. The discussion may be begun by briefly noting the nature of economic rent. Rent is the income derived by the owner from those productive powers of land which are said to be "natural" or "inherent" in it, and those advantages of situation enjoyed by it, the supply of which cannot be appreciably affected by any action of man, because not dependent on human effort. Such being the nature of rent, what is a tax upon it other than a tax upon the rent-yielding properties of the land? Unless it can be demonstrated that a tax on rent would have the effect of diminishing the supply of these, just as a tax on interest operates to raise interest only by diminishing the supply of interest yielding capital, I fail to see how a tax on rent would have the effect of raising price and thus of being shifted to the consumer. One might go even further and maintain that a tax on rent could raise price only on condition of rent entering, in some way or other, into price. Indeed, I am almost tempted in this connection to venture the opinion, as a description of a general tendency, that *a special tax on any form of income will move in the direction of the income*. Where the particular form of income enters into price the tax will tend to raise price, and *vice versa*. Now, do particular rents enter into price? This, it seems to me, is the real question suggested by this discussion, but to this question Professor Seligman gives us no answer, and apparently because he does not see that it is involved in his problem.

While it is undoubtedly true that rent *per se* does not enter into price, it is fairly clear that it does influence, or affect price, though not in so direct or simple a manner as to make it easy to say whether a tax upon it will, or always even, may be shifted. The relation of rent to price may be stated thus: Rent does not directly enter into price, but it does "enter" into those circumstances which determine the margin of cultivation for different crops, and so may be said to indirectly enter into price. Professor Marshall has shown how the Ricardian doctrine that rent does not enter into price is apt to be misleading when applied to any one kind of produce taken separately. Of course, when the margin of cultivation for any particular kind of produce is once fixed, it is true of any piece of land that its own rent does not enter into the supply price of the produce grown upon it. But the doctrine does not affirm that, in estimating the circumstances determining the margin of cultivation for different kinds of produce,

no account need be taken of rent in general. For, indeed, among the circumstances helping to fix the margin for any particular kind of produce, must be reckoned the rent that land suitable for this purpose may be made to yield when used for growing other crops to which it is still more perfectly adapted. The general conditions of demand and supply determine what land shall be cultivated, and in what proportions it is to be broken up among the various crops so as to satisfy the requirements made upon it. The relative advantages of the different lands will cause them to be distributed into certain classes growing different kinds of produce, each with its margin of cultivation determined; so long as the conditions are unchanged a stable equilibrium will be maintained. But a change of the existing conditions will, if serious enough, disturb the existing distribution of land and lead to a re-distribution; and this may result in an alteration of the margins of cultivation and a change, at least, of relative prices.

Is a tax on a rent such a disturbing influence? The ground may be partly cleared for answering this by showing that under certain circumstances it could not be. If it were customary to speak of land in the language applied to capital and human faculties, we might say that land, in most advanced communities, was a more or less, highly specialized form of productive power; *i. e.*, that the properties of large classes of lands marked them out favorably for certain kinds of culture, to comparative exclusion from others. Wherever this was the situation a tax could only begin to exert a disturbing influence after it had risen so high as to absorb the whole of that portion of the rent yielded by these special relative advantages. What disturbance it would exert if it went beyond this point is a problem of some difficulty to determine.

We may here return to Professor Seligman's argument that a tax on corn rents would discourage the cultivation of corn, and so raise the price and cause a shifting of the tax. It may be allowed that the imposition of such a tax would tend to discourage the cultivation of corn everywhere except on the no-rent corn lands. Cultivation of corn on these lands would be at least as profitable after as before the imposition of the tax. Theoretically, we may reason that the price of corn will tend to rise by the transfer of the higher grades of land to rye-growing. But we are bound to ask in the same breath how long this rise will be maintained, and whether it will be attended with any further neutralizing effects, such as a fall in the price of rye. Does not the corn-planter, in his effort to avoid the burden of the tax on

corn rents, by turning to rye-growing, invite a new loss in the fall of the price of rye, which will be brought on by increased production? And will not this fall in price discourage rye-growing? The supposed rise in the price of corn, and the corresponding fall in the price of rye, will not be without important influence on the relative profitability of these two branches of cultivation, particularly as concerns the lower grades of land. The rise of corn would increase the profitability of corn-growing on the marginal lands, and for an opposite reason rye-growing on marginal lands would be discouraged. The supposed movement of the higher grades of land from corn to rye would stimulate a counter-movement of the lower grades of rye land to corn. It may be assumed that the latter movement would go on *pari passu* with the former, the tendency toward a rise in the price of corn being thus held in check. Whether there would ultimately result a permanent rise in the price of corn would depend on whether or not, in consequence of the re-distribution of land, there had been any change in its margin of cultivation. Without such a change in the margin of cultivation there could be no permanent change in price, and, unless the margin were extended, no part of the tax would be paid by the consumer. I am not here especially concerned to show what the incidence of a special tax on rent would be, but what, under certain circumstances, it would not be, and, more particularly, to point out some difficulties in the way of a ready acceptance of Professor Seligman's doctrine that such a tax would be shifted to the consumer. I am inclined to think that so far as such a tax would begin to operate as, for the purpose of this argument, I have allowed myself to assume it would, the initial disturbance, following the imposition of the tax, particularly if severe and protracted, would propagate itself along the whole line of related lands—those having certain qualities in common—by successively affecting the margin of cultivation in each class. There would follow, upon the disturbance, a certain amount of interaction between the demand and supply for each of the different kinds of produce, and a new equilibrium would be experientially worked out. In just the degree in which relative prices would have changed in consequence of the disturbance would be the distribution or incidence of the burden of the tax.

If this reasoning on the incidence of a special tax on rent has any merit, it may serve to indicate how the problem of the incidence of the special tax on profits is to be approached under the no-profits theory,

and to what extent the conclusion that such a tax will be entirely shifted to the consumer needs to be qualified, as well as the doctrine that profits do not enter into price, granting the leading premises upon which it is based.

5. Professor Seligman's present paragraph on interest raises some interesting questions, but their discussion would be inappropriate in this connection. There is some difficulty in understanding why, if all interest were loan-interest, it would stand in so fundamentally different a relation to cost of production from where a part of it is pure or economic interest. The distinction appears to be a pretty thin one, and must rest upon a curious psychological fact. Would Professor Seligman also argue that if all production were carried on by the services of hired managers and with the use of rented land that then profits and rent would also be necessary parts of cost of production? So far as my criticism of Professor Seligman's reasoning against the "excess-of-price-above-tax" doctrine proceeded upon the mistaken assumption that he did not hold the no-interest theory, the ground of contention falls away. But his argument against that doctrine is still seriously defective on the logical side. It is a part of his general doctrine of incidence, that a "special tax on capital will be shifted to the borrower," and in the present note he is at some pains to show that a special tax on profits will also be shifted. It need hardly be pointed out that the question whether anything in excess of the tax can be shifted can arise only in the discussion of the special taxes. For, where the tax itself cannot be shifted—and this is the case with the general tax—it would obviously be impossible that anything in excess of the tax should be shifted. Now, recurring to Professor Seligman's own reasoning on the shifting of the special tax on profits, let us examine how the situation of any set of related producers would be affected by the imposition of a special tax in the early stages of the production of a finished commodity. Professor Seligman admits that the tax would constitute an additional expense in such an industry; it would, therefore, necessitate an increased outlay of capital by the successive producers or dealers through whose hands the given commodity must pass before reaching the consumer. Unless the producers earned either interest or profits on the increased investment, their incomes would be not only relatively less than they were before the imposition of the tax, but less than they could expect to receive by entering some untaxed branch of industry. On Professor Seligman's own theory,

there would take place an exodus, not necessarily of the no-interest and no-profits man, but of some of the profits and interest-receiving class, which would diminish supply and increase price. The rise of price would go on until interest and profits, either or both, were shifted to the consumer. This conclusion seems to be strictly warranted by a consistent application of Professor Seligman's own theories as stated by himself, and so far diminishes the force of his reasoning against the doctrine that the price of a commodity may be raised somewhat higher than the amount of the tax, and the practical rule that is readily drawn from it. Whenever the tax itself is shifted it is at least possible that something in excess of it should be shifted.

My inclination to abstain from controversy is so considerable that I have been reluctantly induced to say what I have said in partial explanation of the points at issue. So much of recent economic controversy has failed, when pursued far enough, to issue in anything more fruitful than mere explanations of words, that one is seriously warned to keep off the ground. I have been the more reluctant in the present instance because the principal points of difference lie somewhat outside of the main subject of Professor Seligman's monograph, and would require for adequate treatment a lengthy discussion. The great public importance of the subject of finance, the practical value of sound doctrines of incidence, and the high quality of Professor Seligman's monograph, however, justify me in having said as much as I have.

UNIVERSITY OF CHICAGO.

A. C. MILLER.